



RECEIVED

JUN 04 2002

Wed May 21 09:22:22 2001 [BLASTN 2.2.1 [Jul-12-2001], NCBI]

RepeatMasker (summary below)

/home/ruby/va/Molbio/carpanda/tempblast/ss.DNA35680 (3531 bp) TECH CENTER 1600/2900

| Sequences producing High-scoring Segment Pairs:       | Frame | Score | Match | Pct | E-val |
|---|-------|-------|-------|-----|-------|
| 1 P_AAZ64954 Membrane-bound protein PRO290 encoding c | +     | 3531  | 3531  | 100 | 0.0   |
| 2 P_AAF44100 Human PRO290 (UNQ253) nucleotide sequenc | +     | 3531  | 3531  | 100 | 0.0   |
| 3 P_AAC58368 Human PRO290 nucleotide sequence SEQ ID  | +     | 3531  | 3531  | 100 | 0.0   |

>1 P\_AAZ64954 Membrane-bound protein PRO290 encoding cDNA. (3531 bp) [1 seg]  
Score = 3531 (7000 bits), Expect = 0.0  
Identities = 3531/3531 (100%), at 1,1-3531,3531, Strand +/+

|             |     |  |
|-------------|-----|--|
| ss.DNA35680 | 1   | CCCACGCGTCCGCCCACGCGTCCGGCTGAACACCTCTTCTTTGGAGTCAGCCACTGATGA |
|             |     | *****  |
| P_AAZ64954  | 1   | CCCACGCGTCCGCCCACGCGTCCGGCTGAACACCTCTTCTTTGGAGTCAGCCACTGATGA |
| ss.DNA35680 | 61  | GGCAGGGTCCCCACTTGCAGCTGCAGCAGCTGCAGCAGCTGCAGAGCGCTGCTCCTGGCT |
|             |     | *****  |
| P_AAZ64954  | 61  | GGCAGGGTCCCCACTTGCAGCTGCAGCAGCTGCAGCAGCTGCAGAGCGCTGCTCCTGGCT |
| ss.DNA35680 | 121 | GGTGCCACTGGTGCGCACGCTGCTAGACCGTGCCTATGAGCCGCTGGGGCTGCAGTGGGG |
|             |     | *****  |
| P_AAZ64954  | 121 | GGTGCCACTGGTGCGCACGCTGCTAGACCGTGCCTATGAGCCGCTGGGGCTGCAGTGGGG |
| ss.DNA35680 | 181 | ACTGCCCTCCCTGCCACCCACCAATGGCAGCCCCACCTTCTTTGAAGACTTCCAGGCTTT |
|             |     | *****  |
| P_AAZ64954  | 181 | ACTGCCCTCCCTGCCACCCACCAATGGCAGCCCCACCTTCTTTGAAGACTTCCAGGCTTT |
| ss.DNA35680 | 241 | TTGTGCCACACCCGAATGGCGCCACTTCATCGACAAACAGGTACAGCCAACCATGTCCCA |
|             |     | *****  |
| P_AAZ64954  | 241 | TTGTGCCACACCCGAATGGCGCCACTTCATCGACAAACAGGTACAGCCAACCATGTCCCA |
| ss.DNA35680 | 301 | GTTCGAAATGGACACGTATGCTAAGAGCCACGACCTTATGTCAGGTTTCTGGAATGCCTG |
|             |     | *****  |
| P_AAZ64954  | 301 | GTTCGAAATGGACACGTATGCTAAGAGCCACGACCTTATGTCAGGTTTCTGGAATGCCTG |
| ss.DNA35680 | 361 | CTATGACATGCTTATGAGCAGTGGGCAGCGGCCAGTGGGAGCGCGCCAGAGTCGTGC    |
|             |     | *****  |
| P_AAZ64954  | 361 | CTATGACATGCTTATGAGCAGTGGGCAGCGGCCAGTGGGAGCGCGCCAGAGTCGTGC    |
| ss.DNA35680 | 421 | GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG |
|             |     | *****  |
| P_AAZ64954  | 421 | GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG |
| ss.DNA35680 | 481 | CTACACGGCAGTGCTGAAGCAGCAGGCAACGCAGCACTCCATGGCCCTGCTGCACTGGGG |
|             |     | *****  |
| P_AAZ64954  | 481 | CTACACGGCAGTGCTGAAGCAGCAGGCAACGCAGCACTCCATGGCCCTGCTGCACTGGGG |
| ss.DNA35680 | 541 | GGCGCTGTGGCGCCAGCTCGCCAGCCCATGTGGGGCCTGGGCGCTGAGGGACACTCCCAT |
|             |     | *****  |
| P_AAZ64954  | 541 | GGCGCTGTGGCGCCAGCTCGCCAGCCCATGTGGGGCCTGGGCGCTGAGGGACACTCCCAT |
| ss.DNA35680 | 601 | CCCCCGCTGGAAACTGTCCAGCGCCGAGACATATTCACGCATGCGTCTGAAGCTGGTGCC |

BLAST RESULTS A-1

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P_AA264954 601 CCCCCGCTGGAACTGTCCAGCGCCGAGACATATTCACGCATGCGTCTGAAGCTGGTGCC
ss.DNA35680 661 CAACCATCACTTCGACCCTCACCTGGAAGCCAGCGCTCTCCGAGACAATCTGGGTGAGGT
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P_AA264954 661 CAACCATCACTTCGACCCTCACCTGGAAGCCAGCGCTCTCCGAGACAATCTGGGTGAGGT
ss.DNA35680 721 TCCCCTGACACCCACCGAGGAGGCCTCACTGCCTCTGGCAGTGACCAAAGAGGCCAAAGT
*****
P_AA264954 721 TCCCCTGACACCCACCGAGGAGGCCTCACTGCCTCTGGCAGTGACCAAAGAGGCCAAAGT
ss.DNA35680 781 GAGCACCCACCCGAGTTGCTGCAGGAGGACCAGCTCGGCCGAGGACGAGCTGGCTGAGCT
*****
P_AA264954 781 GAGCACCCACCCGAGTTGCTGCAGGAGGACCAGCTCGGCCGAGGACGAGCTGGCTGAGCT
ss.DNA35680 841 GGAGACCCCGATGGAGGCAGCAGAAGTGGATGAGCAGCGTGAGAAGCTGGTGCTGTCGGC
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P_AA264954 841 GGAGACCCCGATGGAGGCAGCAGAAGTGGATGAGCAGCGTGAGAAGCTGGTGCTGTCGGC
ss.DNA35680 901 CGAGTGCCAGCTGGTGACGGTAGTGGCCGTGGTCCCAGGGCTGCTGGAGGTCACCACACA
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P_AA264954 901 CGAGTGCCAGCTGGTGACGGTAGTGGCCGTGGTCCCAGGGCTGCTGGAGGTCACCACACA
ss.DNA35680 961 GAATGTATACTTCTACGATGGCAGCACTGAGCGCGTGGAAACCGAGGAGGGCATCGGCTA
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P_AA264954 961 GAATGTATACTTCTACGATGGCAGCACTGAGCGCGTGGAAACCGAGGAGGGCATCGGCTA
ss.DNA35680 1021 TGATTTCCGGCGCCCACTGGCCCAGCTGCGTGAGGTCCACCTGCGGCGTTTCAACCTGCG
*****
P_AA264954 1021 TGATTTCCGGCGCCCACTGGCCCAGCTGCGTGAGGTCCACCTGCGGCGTTTCAACCTGCG
ss.DNA35680 1081 CCGTTCAGCACTTGAGCTCTTCTTTATCGATCAGGCCAACTACTTCCTCAACTTCCCATG
*****
P_AA264954 1081 CCGTTCAGCACTTGAGCTCTTCTTTATCGATCAGGCCAACTACTTCCTCAACTTCCCATG
ss.DNA35680 1141 CAAGGTGGGCACGACCCCACTCTCATCTCCTAGCCAGACTCCGAGACCCCAAGCTGGCCC
*****
P_AA264954 1141 CAAGGTGGGCACGACCCCACTCTCATCTCCTAGCCAGACTCCGAGACCCCAAGCTGGCCC
ss.DNA35680 1201 CATCCCACCCCATACCCAGGTACGGAACCAAGGTGTACTCGTGGCTCCTGCGCCTACGGCC
*****
P_AA264954 1201 CATCCCACCCCATACCCAGGTACGGAACCAAGGTGTACTCGTGGCTCCTGCGCCTACGGCC
ss.DNA35680 1261 CCCCTCTCAAGGCTACCTAAGCAGCCGCTCCCCCAGGAGATGCTGCGTGCCTCAGGCCT
*****
P_AA264954 1261 CCCCTCTCAAGGCTACCTAAGCAGCCGCTCCCCCAGGAGATGCTGCGTGCCTCAGGCCT
ss.DNA35680 1321 TACCCAGAAATGGGTACAGCGTGAGATATCCAACCTCGAGTACTTGATGCAACTCAACAC
*****
P_AA264954 1321 TACCCAGAAATGGGTACAGCGTGAGATATCCAACCTCGAGTACTTGATGCAACTCAACAC
ss.DNA35680 1381 CATTGCGGGGCGGACCTACAATGACCTGTCTCAGTACCCTGTGTTCCCCTGGGTCTGCA
*****
P_AA264954 1381 CATTGCGGGGCGGACCTACAATGACCTGTCTCAGTACCCTGTGTTCCCCTGGGTCTGCA
ss.DNA35680 1441 GGA CTACGTGTCCCAACCCCTGGACCTCAGCAACCCAGCCGTCTTCCGGGACCTGTCTAA
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BLAST RESULTS A-2

P\_AA264954 1441 GGACTACGTGTCCCCAACCCCTGGACCTCAGCAACCCAGCCGTCTTCCGGGACCTGTCTAA

ss.DNA35680 1501 GCCCATCGGTGTGGTGAACCCCAAGCATGCCAGCTCGTGAGGGAGAAGTATGAAAGCTT  
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P\_AA264954 1501 GCCCATCGGTGTGGTGAACCCCAAGCATGCCAGCTCGTGAGGGAGAAGTATGAAAGCTT

ss.DNA35680 1561 TGAGGACCCAGCAGGGACCATTGACAAGTTCCACTATGGCACCCACTACTCCAATGCAGC  
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P\_AA264954 1561 TGAGGACCCAGCAGGGACCATTGACAAGTTCCACTATGGCACCCACTACTCCAATGCAGC

ss.DNA35680 1621 AGGCGTGATGCACTACCTCATCCGCGTGGAGCCCTTCACCTCCCTGCACGTCCAGCTGCA  
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P\_AA264954 1621 AGGCGTGATGCACTACCTCATCCGCGTGGAGCCCTTCACCTCCCTGCACGTCCAGCTGCA

ss.DNA35680 1681 AAGTGGCCGCTTTGACTGCTCCGACCGGCAGTTCCACTCGGTGGCGGCAGCCTGGCAGGC  
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P\_AA264954 1681 AAGTGGCCGCTTTGACTGCTCCGACCGGCAGTTCCACTCGGTGGCGGCAGCCTGGCAGGC

ss.DNA35680 1741 ACGCCTGGAGAGCCCTGCCGATGTGAAGGAGCTCATCCCGAATTCTTCTACTTTCTCTGA  
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P\_AA264954 1741 ACGCCTGGAGAGCCCTGCCGATGTGAAGGAGCTCATCCCGAATTCTTCTACTTTCTCTGA

ss.DNA35680 1801 CTTCTGGAGAACCAGAACGGTTTTGACCTGGGCTGTCTCCAGCTGACCAACGAGAAGGT  
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P\_AA264954 1801 CTTCTGGAGAACCAGAACGGTTTTGACCTGGGCTGTCTCCAGCTGACCAACGAGAAGGT

ss.DNA35680 1861 AGGCGATGTGGTGCTACCCCGTGGGCCAGCTCTCTGAGGACTTCATCCAGCAGCACCG  
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P\_AA264954 1861 AGGCGATGTGGTGCTACCCCGTGGGCCAGCTCTCTGAGGACTTCATCCAGCAGCACCG

ss.DNA35680 1921 CCAGGCTCTGGAGTCGGAGTATGTGTCTGCACACCTACACGAGTGGATCGACCTCATCTT  
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P\_AA264954 1921 CCAGGCTCTGGAGTCGGAGTATGTGTCTGCACACCTACACGAGTGGATCGACCTCATCTT

ss.DNA35680 1981 TGGCTACAAGCAGCGGGGGCCAGCCGCCGAGGAGGCCCTCAATGTCTTCTATTACTGCAC  
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P\_AA264954 1981 TGGCTACAAGCAGCGGGGGCCAGCCGCCGAGGAGGCCCTCAATGTCTTCTATTACTGCAC

ss.DNA35680 2041 CTATGAGGGGGCTGTAGACCTGGACCATGTGACAGATGAGCGGGAACGGAAGGCTCTGGA  
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P\_AA264954 2041 CTATGAGGGGGCTGTAGACCTGGACCATGTGACAGATGAGCGGGAACGGAAGGCTCTGGA

ss.DNA35680 2101 GGGCATTATCAGCAACTTTGGGCAGACTCCCTGTCAGCTGCTGAAGGAGCCACATCCAAC  
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P\_AA264954 2101 GGGCATTATCAGCAACTTTGGGCAGACTCCCTGTCAGCTGCTGAAGGAGCCACATCCAAC

ss.DNA35680 2161 TCGGCTCTCAGCTGAGGAAGCAGCCCATCGCCTTGACGCCTGGACACTAACTCACCTAG  
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P\_AA264954 2161 TCGGCTCTCAGCTGAGGAAGCAGCCCATCGCCTTGACGCCTGGACACTAACTCACCTAG

ss.DNA35680 2221 CATCTTCCAGCACCTGGACGAACTCAAGGCATTCTTCGAGAGGTGACTGTGAGTGCCAG  
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P\_AA264954 2221 CATCTTCCAGCACCTGGACGAACTCAAGGCATTCTTCGAGAGGTGACTGTGAGTGCCAG

ss.DNA35680 2281 TGGGCTGCTGGGCACCCACAGCTGGTTGCCCTATGACCGCAACATAAGCAACTACTTCAG  
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P\_AA264954 2281 TGGGCTGCTGGGCACCCACAGCTGGTTGCCCTATGACCGCAACATAAGCAACTACTTCAG

BLAST RESULTS A-3

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ss.DNA35680 2341 CTTACAGCAAAGACCCCCACCATGGGCAGCCACAAGACGCAGCGACTGCTGAGTGGCCCGTG
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P_AAZ64954 2341 CTTACAGCAAAGACCCCCACCATGGGCAGCCACAAGACGCAGCGACTGCTGAGTGGCCCGTG

ss.DNA35680 2401 GGTGCCAGGCAGTGGTGTGAGTGGACAAGCACTGGCAGTGGCCCCGGATGGAAAGCTGCT
*****
P_AAZ64954 2401 GGTGCCAGGCAGTGGTGTGAGTGGACAAGCACTGGCAGTGGCCCCGGATGGAAAGCTGCT

ss.DNA35680 2461 ATTACAGCGGTGGCCACTGGGATGGCAGCCTGCGGGTGACTGCACTACCCCGTGGCAAGCT
*****
P_AAZ64954 2461 ATTACAGCGGTGGCCACTGGGATGGCAGCCTGCGGGTGACTGCACTACCCCGTGGCAAGCT

ss.DNA35680 2521 GTTGAGCCAGCTCAGCTGCCACCTTGATGTAGTAACCTGCCTTGCACTGGACACCTGTGG
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P_AAZ64954 2521 GTTGAGCCAGCTCAGCTGCCACCTTGATGTAGTAACCTGCCTTGCACTGGACACCTGTGG

ss.DNA35680 2581 CATCTACCTCATCTCAGGCTCCCGGGACACCACGTGCATGGTGTGGCGGCTCCTGCATCA
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P_AAZ64954 2581 CATCTACCTCATCTCAGGCTCCCGGGACACCACGTGCATGGTGTGGCGGCTCCTGCATCA

ss.DNA35680 2641 GGGTGGTCTGTCTAGTAGGCTGGCACCAAGCCTGTGCAGGTCCTGTATGGGCATGGGGC
*****
P_AAZ64954 2641 GGGTGGTCTGTCTAGTAGGCTGGCACCAAGCCTGTGCAGGTCCTGTATGGGCATGGGGC

ss.DNA35680 2701 TGCAGTGAGCTGTGTGGCCATCAGCACTGAACTTGACATGGCTGTGTCTGGATCTGAGGA
*****
P_AAZ64954 2701 TGCAGTGAGCTGTGTGGCCATCAGCACTGAACTTGACATGGCTGTGTCTGGATCTGAGGA

ss.DNA35680 2761 TGGAAGTGTGATCATAACACTGTACGCCGCGGACAGTTTGTAGCGGCACTACGGCCTCT
*****
P_AAZ64954 2761 TGGAAGTGTGATCATAACACTGTACGCCGCGGACAGTTTGTAGCGGCACTACGGCCTCT

ss.DNA35680 2821 GGGTGGCCACATTCCCTGGACCTATTTTCCACCTGGCATTGGGGTCCGAAGGCCAGATTGT
*****
P_AAZ64954 2821 GGGTGGCCACATTCCCTGGACCTATTTTCCACCTGGCATTGGGGTCCGAAGGCCAGATTGT

ss.DNA35680 2881 GGTACAGAGCTCAGCGTGGGAACGTCCTGGGGCCCAGGTACCTACTCCTTGACACCTGTA
*****
P_AAZ64954 2881 GGTACAGAGCTCAGCGTGGGAACGTCCTGGGGCCCAGGTACCTACTCCTTGACACCTGTA

ss.DNA35680 2941 TTCAGTCAATGGGAAGTTGCGGGCTTCACTGCCCCCTGGCAGAGCAGCCTACAGCCCTGAC
*****
P_AAZ64954 2941 TTCAGTCAATGGGAAGTTGCGGGCTTCACTGCCCCCTGGCAGAGCAGCCTACAGCCCTGAC

ss.DNA35680 3001 GGTGACAGAGGACTTTGTGTTGCTGGGCACCGCCCAGTGCGCCCTGCACATCCTCCAAC
*****
P_AAZ64954 3001 GGTGACAGAGGACTTTGTGTTGCTGGGCACCGCCCAGTGCGCCCTGCACATCCTCCAAC

ss.DNA35680 3061 AAACACACTGCTCCCGGCCGCGCCTCCCTTGCCCATGAAGGTGGCCATCCGCAGCGTGGC
*****
P_AAZ64954 3061 AAACACACTGCTCCCGGCCGCGCCTCCCTTGCCCATGAAGGTGGCCATCCGCAGCGTGGC

ss.DNA35680 3121 CGTGACCAAGGAGCGCAGCCACGTGCTGGTGGGCCTGGAGGATGGCAAGCTCATCGTGGT
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P_AAZ64954 3121 CGTGACCAAGGAGCGCAGCCACGTGCTGGTGGGCCTGGAGGATGGCAAGCTCATCGTGGT

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BLAST RESULTS A-4

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ss.DNA35680 3181 GGTGCGGGGGCAGCCCTCTGAGGTGCGCAGCAGCCAGTTTCGCGCGGAAGCTGTGGCGGTC
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P_AA264954 3181 GGTGCGGGGGCAGCCCTCTGAGGTGCGCAGCAGCCAGTTTCGCGCGGAAGCTGTGGCGGTC

ss.DNA35680 3241 CTCGCGGGCGCATCTCCCAGGTGTCCTCGGGAGAGACGGAATACAACCCTACTGAGGCGCG
*****
P_AA264954 3241 CTCGCGGGCGCATCTCCCAGGTGTCCTCGGGAGAGACGGAATACAACCCTACTGAGGCGCG

ss.DNA35680 3301 CTGAACCTGGCCAGTCCGGGTGCTCGGGCCCCGCCCCGGCAGGCCTGGCCCCGGGAGGCC
*****
P_AA264954 3301 CTGAACCTGGCCAGTCCGGGTGCTCGGGCCCCGCCCCGGCAGGCCTGGCCCCGGGAGGCC

ss.DNA35680 3361 CCGCCCAGAAGTCGGCGGGAACACCCCGGGGTGGGCAGCCAGGGGGTGAGCGGGGCCCA
*****
P_AA264954 3361 CCGCCCAGAAGTCGGCGGGAACACCCCGGGGTGGGCAGCCAGGGGGTGAGCGGGGCCCA

ss.DNA35680 3421 CCCTGCCCAGCTCAGGGATTGGCGGGCGATGTTACCCCTCAGGGATTGGCGGGCGGAAG
*****
P_AA264954 3421 CCCTGCCCAGCTCAGGGATTGGCGGGCGATGTTACCCCTCAGGGATTGGCGGGCGGAAG

ss.DNA35680 3481 TCCCGCCCCCTCGCCGGGTGAGGGGCCGCCCTGAGGGCCAGCACTGGCGTCT
*****
P_AA264954 3481 TCCCGCCCCCTCGCCGGGTGAGGGGCCGCCCTGAGGGCCAGCACTGGCGTCT

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>2 P\_AAF44100 Human PRO290 (UNQ253) nucleotide sequence SEQ ID NO:32. (3531 bp)  
[1 seg]

Score = 3531 (7000 bits), Expect = 0.0

Identities = 3531/3531 (100%), at 1,1-3531,3531, Strand +/-

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ss.DNA35680 1 CCCACGCGTCCGCCCACGCGTCCGGCTGAACACCTCTTCTTTGGAGTCAGCCACTGATGA
*****
P_AAF44100 1 CCCACGCGTCCGCCCACGCGTCCGGCTGAACACCTCTTCTTTGGAGTCAGCCACTGATGA

ss.DNA35680 61 GGCAGGGTCCCCACTTGCAGCTGCAGCAGCTGCAGCAGCTGCAGAGCGCTGCTCCTGGCT
*****
P_AAF44100 61 GGCAGGGTCCCCACTTGCAGCTGCAGCAGCTGCAGCAGCTGCAGAGCGCTGCTCCTGGCT

ss.DNA35680 121 GGTGCCACTGGTGCACGCTGCTAGACCGTGCCATGAGCCGCTGGGGCTGCAGTGGGG
*****
P_AAF44100 121 GGTGCCACTGGTGCACGCTGCTAGACCGTGCCATGAGCCGCTGGGGCTGCAGTGGGG

ss.DNA35680 181 ACTGCCCTCCCTGCCACCCACCAATGGCAGCCCCACCTTCTTTGAAGACTTCCAGGCTTT
*****
P_AAF44100 181 ACTGCCCTCCCTGCCACCCACCAATGGCAGCCCCACCTTCTTTGAAGACTTCCAGGCTTT

ss.DNA35680 241 TTGTGCCACACCCGAATGGCGCCACTTCATCGACAAACAGGTACAGCCAACCATGTCCCA
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P_AAF44100 241 TTGTGCCACACCCGAATGGCGCCACTTCATCGACAAACAGGTACAGCCAACCATGTCCCA

ss.DNA35680 301 GTTCGAAATGGACACGTATGCTAAGAGCCACGACCTTATGTCAGGTTTCTGGAATGCCTG
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P_AAF44100 301 GTTCGAAATGGACACGTATGCTAAGAGCCACGACCTTATGTCAGGTTTCTGGAATGCCTG

ss.DNA35680 361 CTATGACATGCTTATGAGCAGTGGGCAGCGGCCAGTGGGAGCGCGCCAGAGTCGTCG
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P_AAF44100 361 CTATGACATGCTTATGAGCAGTGGGCAGCGGCCAGTGGGAGCGCGCCAGAGTCGTCG

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BLAST RESULTS A-5

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ss.DNA35680 421 GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG
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P_AAF44100 421 GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG

ss.DNA35680 481 CTACACGGCAGTGCTGAAGCAGCAGGCAACGCAGCACTCCATGGCCCTGCTGCACTGGGG
*****
P_AAF44100 481 CTACACGGCAGTGCTGAAGCAGCAGGCAACGCAGCACTCCATGGCCCTGCTGCACTGGGG

ss.DNA35680 541 GGCCTGTGGCGCCAGCTCGCCAGCCCATGTGGGGCCTGGGCGCTGAGGGACACTCCCAT
*****
P_AAF44100 541 GGCCTGTGGCGCCAGCTCGCCAGCCCATGTGGGGCCTGGGCGCTGAGGGACACTCCCAT

ss.DNA35680 601 CCCCCGCTGGAAACTGTCCAGCGCCGAGACATATTCACGCATGCGTCTGAAGCTGGTGCC
*****
P_AAF44100 601 CCCCCGCTGGAAACTGTCCAGCGCCGAGACATATTCACGCATGCGTCTGAAGCTGGTGCC

ss.DNA35680 661 CAACCATCACTTCGACCCTCACCTGGAAGCCAGCGCTCTCCGAGACAATCTGGGTGAGGT
*****
P_AAF44100 661 CAACCATCACTTCGACCCTCACCTGGAAGCCAGCGCTCTCCGAGACAATCTGGGTGAGGT

ss.DNA35680 721 TCCCCTGACACCCACCGAGGAGGCCTCACTGCCTCTGGCAGTGACCAAAGAGGCCAAAGT
*****
P_AAF44100 721 TCCCCTGACACCCACCGAGGAGGCCTCACTGCCTCTGGCAGTGACCAAAGAGGCCAAAGT

ss.DNA35680 781 GAGCACCCACCCGAGTTGCTGCAGGAGGACCAGCTCGGCGAGGACGAGCTGGCTGAGCT
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P_AAF44100 781 GAGCACCCACCCGAGTTGCTGCAGGAGGACCAGCTCGGCGAGGACGAGCTGGCTGAGCT

ss.DNA35680 841 GGAGACCCCGATGGAGGCAGCAGAACTGGATGAGCAGCGTGAGAAGCTGGTGCTGTCGGC
*****
P_AAF44100 841 GGAGACCCCGATGGAGGCAGCAGAACTGGATGAGCAGCGTGAGAAGCTGGTGCTGTCGGC

ss.DNA35680 901 CGAGTGCCAGCTGGTGACGGTAGTGGCCGTGGTCCCAGGGCTGCTGGAGGTCACCACACA
*****
P_AAF44100 901 CGAGTGCCAGCTGGTGACGGTAGTGGCCGTGGTCCCAGGGCTGCTGGAGGTCACCACACA

ss.DNA35680 961 GAATGTATACTTCTACGATGGCAGCACTGAGCGCGTGGAACCGAGGAGGGCATCGGCTA
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P_AAF44100 961 GAATGTATACTTCTACGATGGCAGCACTGAGCGCGTGGAACCGAGGAGGGCATCGGCTA

ss.DNA35680 1021 TGATTTCCGGCGCCCACTGGCCCAGCTGCGTGAGGTCCACCTGCGGCGTTTCAACCTGCG
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P_AAF44100 1021 TGATTTCCGGCGCCCACTGGCCCAGCTGCGTGAGGTCCACCTGCGGCGTTTCAACCTGCG

ss.DNA35680 1081 CCGTTCAGCACTTGAGCTCTTCTTTATCGATCAGGCCAACTACTTCCTCAACTTCCCATG
*****
P_AAF44100 1081 CCGTTCAGCACTTGAGCTCTTCTTTATCGATCAGGCCAACTACTTCCTCAACTTCCCATG

ss.DNA35680 1141 CAAGGTGGGCACGACCCCACTCTCATCTCCTAGCCAGACTCCGAGACCCAGCCTGGCCC
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P_AAF44100 1141 CAAGGTGGGCACGACCCCACTCTCATCTCCTAGCCAGACTCCGAGACCCAGCCTGGCCC

ss.DNA35680 1201 CATCCCACCCCATACCCAGGTACGGAACCAGGTGTACTCGTGGCTCCTGCGCCTACGGCC
*****
P_AAF44100 1201 CATCCCACCCCATACCCAGGTACGGAACCAGGTGTACTCGTGGCTCCTGCGCCTACGGCC

ss.DNA35680 1261 CCCCTCTCAAGGCTACCTAAGCAGCCGCTCCCCCAGGAGATGCTGCGTGCCCTCAGGCCT

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BLAST RESULTS A49

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P_AAF44100 1261 CCCCTCTCAAGGCTACCTAAGCAGCCGCTCCCCCAGGAGATGCTGCGTGCCTCAGGCCT
ss.DNA35680 1321 TACCCAGAAATGGGTACAGCGTGAGATATCCAACCTTCGAGTACTTGATGCAACTCAACAC
*****
P_AAF44100 1321 TACCCAGAAATGGGTACAGCGTGAGATATCCAACCTTCGAGTACTTGATGCAACTCAACAC
ss.DNA35680 1381 CATTGCGGGGCGGACCTACAATGACCTGTCTCAGTACCCTGTGTTCCCTGGGTCTGCA
*****
P_AAF44100 1381 CATTGCGGGGCGGACCTACAATGACCTGTCTCAGTACCCTGTGTTCCCTGGGTCTGCA
ss.DNA35680 1441 GGACTACGTGTCCCAACCCTGGACCTCAGCAACCCAGCCGCTTCCGGGACCTGTCTAA
*****
P_AAF44100 1441 GGACTACGTGTCCCAACCCTGGACCTCAGCAACCCAGCCGCTTCCGGGACCTGTCTAA
ss.DNA35680 1501 GCCCATCGGTGTGGTGAACCCCAAGCATGCCAGCTCGTGAGGGAGAAGTATGAAAGCTT
*****
P_AAF44100 1501 GCCCATCGGTGTGGTGAACCCCAAGCATGCCAGCTCGTGAGGGAGAAGTATGAAAGCTT
ss.DNA35680 1561 TGAGGACCCAGCAGGGACCATTGACAAGTTCCACTATGGCACCCACTACTCCAATGCAGC
*****
P_AAF44100 1561 TGAGGACCCAGCAGGGACCATTGACAAGTTCCACTATGGCACCCACTACTCCAATGCAGC
ss.DNA35680 1621 AGGCGTGATGCACTACCTCATCCGCGTGAGCCCTTCACCTCCCTGCACGTCCAGCTGCA
*****
P_AAF44100 1621 AGGCGTGATGCACTACCTCATCCGCGTGAGCCCTTCACCTCCCTGCACGTCCAGCTGCA
ss.DNA35680 1681 AAGTGGCCGCTTTGACTGCTCCGACCGGCAGTTCCACTCGGTGGCGGCAGCCTGGCAGGC
*****
P_AAF44100 1681 AAGTGGCCGCTTTGACTGCTCCGACCGGCAGTTCCACTCGGTGGCGGCAGCCTGGCAGGC
ss.DNA35680 1741 ACGCCTGGAGAGCCCTGCCGATGTGAAGGAGCTCATCCCGGAATTCTTCTACTTTCCTGA
*****
P_AAF44100 1741 ACGCCTGGAGAGCCCTGCCGATGTGAAGGAGCTCATCCCGGAATTCTTCTACTTTCCTGA
ss.DNA35680 1801 CTTCTGGGAGAACCCAGAACGGTTTTGACCTGGGCTGTCTCCAGCTGACCAACGAGAAGGT
*****
P_AAF44100 1801 CTTCTGGGAGAACCCAGAACGGTTTTGACCTGGGCTGTCTCCAGCTGACCAACGAGAAGGT
ss.DNA35680 1861 AGGCGATGTGGTGCTACCCCCGTGGGCCAGCTCTCCTGAGGACTTCATCCAGCAGCACCG
*****
P_AAF44100 1861 AGGCGATGTGGTGCTACCCCCGTGGGCCAGCTCTCCTGAGGACTTCATCCAGCAGCACCG
ss.DNA35680 1921 CCAGGCTCTGGAGTCGGAGTATGTGTCTGCACACCTACACGAGTGGATCGACCTCATCTT
*****
P_AAF44100 1921 CCAGGCTCTGGAGTCGGAGTATGTGTCTGCACACCTACACGAGTGGATCGACCTCATCTT
ss.DNA35680 1981 TGGCTACAAGCAGCGGGGGCCAGCCGCCGAGGAGGCCCTCAATGTCTTCTATTACTGCAC
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P_AAF44100 1981 TGGCTACAAGCAGCGGGGGCCAGCCGCCGAGGAGGCCCTCAATGTCTTCTATTACTGCAC
ss.DNA35680 2041 CTATGAGGGGGCTGTAGACCTGGACCATGTGACAGATGAGCGGGAACGGAAGGCTCTGGA
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P_AAF44100 2041 CTATGAGGGGGCTGTAGACCTGGACCATGTGACAGATGAGCGGGAACGGAAGGCTCTGGA
ss.DNA35680 2101 GGGCATTATCAGCAACTTTGGGCAGACTCCCTGTCAGCTGCTGAAGGAGCCACATCCAAC
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BLAST RESULTS A-7

P\_AAF44100 2101 GGGCATTATCAGCAACTTTGGGCAGACTCCCTGTCAGCTGCTGAAGGAGCCACATCCAAC  
 ss.DNA35680 2161 TCGGCTCTCAGCTGAGGAAGCAGCCCATCGCCTTGACAGCCTGGACACTAACTCACCTAG  
 \*\*\*\*\*  
 P\_AAF44100 2161 TCGGCTCTCAGCTGAGGAAGCAGCCCATCGCCTTGACAGCCTGGACACTAACTCACCTAG  
 ss.DNA35680 2221 CATCTTCCAGCACCTGGACGAACTCAAGGCATTCTTCGCAGAGGTGACTGTGAGTGCCAG  
 \*\*\*\*\*  
 P\_AAF44100 2221 CATCTTCCAGCACCTGGACGAACTCAAGGCATTCTTCGCAGAGGTGACTGTGAGTGCCAG  
 ss.DNA35680 2281 TGGGCTGCTGGGCACCCACAGCTGGTTGCCCTATGACCGCAACATAAGCAACTACTTCAG  
 \*\*\*\*\*  
 P\_AAF44100 2281 TGGGCTGCTGGGCACCCACAGCTGGTTGCCCTATGACCGCAACATAAGCAACTACTTCAG  
 ss.DNA35680 2341 CTTCAGCAAAGACCCACCATGGGCAGCCACAAGACGCAGCGACTGCTGAGTGCCCCGTG  
 \*\*\*\*\*  
 P\_AAF44100 2341 CTTCAGCAAAGACCCACCATGGGCAGCCACAAGACGCAGCGACTGCTGAGTGCCCCGTG  
 ss.DNA35680 2401 GGTGCCAGGCAGTGGTGTGAGTGGACAAGCACTGGCAGTGGCCCCGGATGGAAAGCTGCT  
 \*\*\*\*\*  
 P\_AAF44100 2401 GGTGCCAGGCAGTGGTGTGAGTGGACAAGCACTGGCAGTGGCCCCGGATGGAAAGCTGCT  
 ss.DNA35680 2461 ATTCAGCGGTGGCCACTGGGATGGCAGCCTGCGGGTGACTGCACTACCCCGTGGCAAGCT  
 \*\*\*\*\*  
 P\_AAF44100 2461 ATTCAGCGGTGGCCACTGGGATGGCAGCCTGCGGGTGACTGCACTACCCCGTGGCAAGCT  
 ss.DNA35680 2521 GTTGAGCCAGCTCAGCTGCCACCTTGATGTAGTAACCTGCCTTGCACTGGACACCTGTGG  
 \*\*\*\*\*  
 P\_AAF44100 2521 GTTGAGCCAGCTCAGCTGCCACCTTGATGTAGTAACCTGCCTTGCACTGGACACCTGTGG  
 ss.DNA35680 2581 CATCTACCTCATCTCAGGCTCCCGGGACACCACGTGCATGGTGTGGCGGCTCCTGCATCA  
 \*\*\*\*\*  
 P\_AAF44100 2581 CATCTACCTCATCTCAGGCTCCCGGGACACCACGTGCATGGTGTGGCGGCTCCTGCATCA  
 ss.DNA35680 2641 GGGTGGTCTGTCAGTAGGCCTGGCACCAAAGCCTGTGCAGGTCTGTATGGGCATGGGGC  
 \*\*\*\*\*  
 P\_AAF44100 2641 GGGTGGTCTGTCAGTAGGCCTGGCACCAAAGCCTGTGCAGGTCTGTATGGGCATGGGGC  
 ss.DNA35680 2701 TGCAGTGAGCTGTGTGGCCATCAGCACTGAACTTGACATGGCTGTGTCTGGATCTGAGGA  
 \*\*\*\*\*  
 P\_AAF44100 2701 TGCAGTGAGCTGTGTGGCCATCAGCACTGAACTTGACATGGCTGTGTCTGGATCTGAGGA  
 ss.DNA35680 2761 TGGAAGTGTGATCATACACACTGTACGCCGCGGACAGTTTGTAGCGGCACTACGGCCTCT  
 \*\*\*\*\*  
 P\_AAF44100 2761 TGGAAGTGTGATCATACACACTGTACGCCGCGGACAGTTTGTAGCGGCACTACGGCCTCT  
 ss.DNA35680 2821 GGGTGCCACATTCCCTGGACCTATTTTCCACCTGGCATTGGGGTCCGAAGGCCAGATTGT  
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 P\_AAF44100 2821 GGGTGCCACATTCCCTGGACCTATTTTCCACCTGGCATTGGGGTCCGAAGGCCAGATTGT  
 ss.DNA35680 2881 GGTACAGAGCTCAGCGTGGGAACGTCCTGGGGCCCAGGTACCTACTCCTTGCACCTGTA  
 \*\*\*\*\*  
 P\_AAF44100 2881 GGTACAGAGCTCAGCGTGGGAACGTCCTGGGGCCCAGGTACCTACTCCTTGCACCTGTA  
 ss.DNA35680 2941 TTCAGTCAATGGGAAGTTGCGGGCTTCACTGCCCCTGGCAGAGCAGCCTACAGCCCTGAC  
 \*\*\*\*\*  
 P\_AAF44100 2941 TTCAGTCAATGGGAAGTTGCGGGCTTCACTGCCCCTGGCAGAGCAGCCTACAGCCCTGAC

BLAST RESULTS A-B



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ss.DNA35680 3001 GGTGACAGAGGACTTTGTGTTGCTGGGCACCGCCCAGTGCGCCCTGCACATCCTCCAAC
*****
P_AAF44100 3001 GGTGACAGAGGACTTTGTGTTGCTGGGCACCGCCCAGTGCGCCCTGCACATCCTCCAAC
*****
ss.DNA35680 3061 AAACACACTGCTCCCGGCCGCGCCTCCCTTGCCCATGAAGGTGGCCATCCGCAGCGTGGC
*****
P_AAF44100 3061 AAACACACTGCTCCCGGCCGCGCCTCCCTTGCCCATGAAGGTGGCCATCCGCAGCGTGGC
*****
ss.DNA35680 3121 CGTGACCAAGGAGCGCAGCCACGTGCTGGTGGGCCTGGAGGATGGCAAGCTCATCGTGCT
*****
P_AAF44100 3121 CGTGACCAAGGAGCGCAGCCACGTGCTGGTGGGCCTGGAGGATGGCAAGCTCATCGTGCT
*****
ss.DNA35680 3181 GGTGCGGGGGCAGCCCTCTGAGGTGCGCAGCAGCCAGTTCGCGCGGAAGCTGTGGCGGTC
*****
P_AAF44100 3181 GGTGCGGGGGCAGCCCTCTGAGGTGCGCAGCAGCCAGTTCGCGCGGAAGCTGTGGCGGTC
*****
ss.DNA35680 3241 CTCGCGGGCGCATCTCCAGGTGTCCTCGGGAGAGACGGAATACAACCCTACTGAGGCGCG
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P_AAF44100 3241 CTCGCGGGCGCATCTCCAGGTGTCCTCGGGAGAGACGGAATACAACCCTACTGAGGCGCG
*****
ss.DNA35680 3301 CTGAACCTGGCCAGTCCGGCTGCTCGGGCCCCGCCCCCGGCAGGCCTGGCCCCGGGAGGCC
*****
P_AAF44100 3301 CTGAACCTGGCCAGTCCGGCTGCTCGGGCCCCGCCCCCGGCAGGCCTGGCCCCGGGAGGCC
*****
ss.DNA35680 3361 CCGCCCAGAAGTCGGCGGGGAACACCCCGGGGTGGGCAGCCCAGGGGGTGAGCGGGGCCCCA
*****
P_AAF44100 3361 CCGCCCAGAAGTCGGCGGGGAACACCCCGGGGTGGGCAGCCCAGGGGGTGAGCGGGGCCCCA
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ss.DNA35680 3421 CCCTGCCCAGCTCAGGGATTGGCGGGCGATGTTACCCCCTCAGGGATTGGCGGGCGGAAG
*****
P_AAF44100 3421 CCCTGCCCAGCTCAGGGATTGGCGGGCGATGTTACCCCCTCAGGGATTGGCGGGCGGAAG
*****
ss.DNA35680 3481 TCCCGCCCCCTCGCCGGCTGAGGGGCGGCCCTGAGGGCCAGCACTGGCGTCT
*****
P_AAF44100 3481 TCCCGCCCCCTCGCCGGCTGAGGGGCGGCCCTGAGGGCCAGCACTGGCGTCT
*****

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>3 P\_AAC58368 Human PRO290 nucleotide sequence SEQ ID NO:6. (3531 bp) [1 seg]  
 Score = 3531 (7000 bits), Expect = 0.0  
 Identities = 3531/3531 (100%), at 1,1-3531,3531, Strand +/-

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ss.DNA35680 1 CCCACGCGTCCGCCCACGCGTCCGGCTGAACACCTCTTCTTTGGAGTCAGCCACTGATGA
*****
P_AAC58368 1 CCCACGCGTCCGCCCACGCGTCCGGCTGAACACCTCTTCTTTGGAGTCAGCCACTGATGA
*****
ss.DNA35680 61 GGCAGGGTCCCCACTTGACAGCTGCAGCAGCTGCAGCAGCTGCAGAGCGCTGCTCCTGGCT
*****
P_AAC58368 61 GGCAGGGTCCCCACTTGACAGCTGCAGCAGCTGCAGCAGCTGCAGAGCGCTGCTCCTGGCT
*****
ss.DNA35680 121 GGTGCCACTGGTGCGCACGCTGCTAGACCGTGCCTATGAGCCGCTGGGGCTGCAGTGGGG
*****
P_AAC58368 121 GGTGCCACTGGTGCGCACGCTGCTAGACCGTGCCTATGAGCCGCTGGGGCTGCAGTGGGG
*****
ss.DNA35680 181 ACTGCCCTCCCTGCCACCCACCAATGGCAGCCCCACCTTCTTTGAAGACTTCCAGGCTTT
*****
P_AAC58368 181 ACTGCCCTCCCTGCCACCCACCAATGGCAGCCCCACCTTCTTTGAAGACTTCCAGGCTTT
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BLAST RESULTS A-9

ss.DNA35680 241 TTGTGCCACACCCGAATGGCGCCACTTCATCGACAAACAGGTACAGCCAACCATGTCCCA  
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 P\_AAC58368 241 TTGTGCCACACCCGAATGGCGCCACTTCATCGACAAACAGGTACAGCCAACCATGTCCCA  
 ss.DNA35680 301 GTTCGAAATGGACACGTATGCTAAGAGCCACGACCTTATGTCAGGTTTCTGGAATGCCTG  
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 P\_AAC58368 301 GTTCGAAATGGACACGTATGCTAAGAGCCACGACCTTATGTCAGGTTTCTGGAATGCCTG  
 ss.DNA35680 361 CTATGACATGCTTATGAGCAGTGGGCAGCGGCGCCAGTGGGAGCGCGCCAGAGTCGTG  
 \*\*\*\*\*  
 P\_AAC58368 361 CTATGACATGCTTATGAGCAGTGGGCAGCGGCGCCAGTGGGAGCGCGCCAGAGTCGTG  
 ss.DNA35680 421 GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG  
 \*\*\*\*\*  
 P\_AAC58368 421 GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG  
 ss.DNA35680 481 CTACACGGCAGTGCTGAAGCAGCAGGCAACGCAGCACTCCATGGCCCTGCTGCACTGGGG  
 \*\*\*\*\*  
 P\_AAC58368 481 CTACACGGCAGTGCTGAAGCAGCAGGCAACGCAGCACTCCATGGCCCTGCTGCACTGGGG  
 ss.DNA35680 541 GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG  
 \*\*\*\*\*  
 P\_AAC58368 541 GGCCTTCCAGGAGCTGGTGCTGGAACCTGCGCAGAGGCGGGCGCGCCTGGAGGGGCTACG  
 ss.DNA35680 601 CCCCCGCTGGAAACTGTCCAGCGCCGAGACATATTCACGCATGCGTCTGAAGCTGGTGCC  
 \*\*\*\*\*  
 P\_AAC58368 601 CCCCCGCTGGAAACTGTCCAGCGCCGAGACATATTCACGCATGCGTCTGAAGCTGGTGCC  
 ss.DNA35680 661 CAACCATCACTTCGACCCTCACCTGGAAGCCAGCGCTCTCCGAGACAATCTGGGTGAGGT  
 \*\*\*\*\*  
 P\_AAC58368 661 CAACCATCACTTCGACCCTCACCTGGAAGCCAGCGCTCTCCGAGACAATCTGGGTGAGGT  
 ss.DNA35680 721 TCCCCTGACACCCACCGAGGAGGCCTCACTGCCTCTGGCAGTGACCAAGAGGGCCAAAGT  
 \*\*\*\*\*  
 P\_AAC58368 721 TCCCCTGACACCCACCGAGGAGGCCTCACTGCCTCTGGCAGTGACCAAGAGGGCCAAAGT  
 ss.DNA35680 781 GAGCACCCACCCGAGTTGCTGCAGGAGGACCAGCTCGGCGAGGACGAGCTGGCTGAGCT  
 \*\*\*\*\*  
 P\_AAC58368 781 GAGCACCCACCCGAGTTGCTGCAGGAGGACCAGCTCGGCGAGGACGAGCTGGCTGAGCT  
 ss.DNA35680 841 GGAGACCCCGATGGAGGCAGCAGAACTGGATGAGCAGCGTGAGAAGCTGGTGCTGTGCGC  
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 P\_AAC58368 841 GGAGACCCCGATGGAGGCAGCAGAACTGGATGAGCAGCGTGAGAAGCTGGTGCTGTGCGC  
 ss.DNA35680 901 CGAGTGCCAGCTGGTGACGGTAGTGGCCGTGGTCCCAGGGCTGCTGGAGGTCACCAACA  
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 P\_AAC58368 901 CGAGTGCCAGCTGGTGACGGTAGTGGCCGTGGTCCCAGGGCTGCTGGAGGTCACCAACA  
 ss.DNA35680 961 GAATGTATACTTCTACGATGGCAGCACTGAGCGCGTGGAACCGAGGAGGGCATCGGCTA  
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 P\_AAC58368 961 GAATGTATACTTCTACGATGGCAGCACTGAGCGCGTGGAACCGAGGAGGGCATCGGCTA  
 ss.DNA35680 1021 TGATTTCCGGCGCCCACTGGCCAGCTGCGTGAGGTCCACCTGCGGCGTTTCAACCTGCG  
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 P\_AAC58368 1021 TGATTTCCGGCGCCCACTGGCCAGCTGCGTGAGGTCCACCTGCGGCGTTTCAACCTGCG  
 ss.DNA35680 1081 CCGTTCAGCACTTGAGCTCTTCTTATCGATCAGGCCAACTACTTCCTCAACTTCCCATG

BLAST RESULTS A-10

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P_AAC58368 1081 CCGTTCAGCACTTGAGCTCTTCTTTATCGATCAGGCCAACTACTTCCTCAACTTCCCATG
ss.DNA35680 1141 CAAGGTGGGCACGACCCCAGTCTCATCTCCTAGCCAGACTCCGAGACCCCAGCCTGGCCC
*****
P_AAC58368 1141 CAAGGTGGGCACGACCCCAGTCTCATCTCCTAGCCAGACTCCGAGACCCCAGCCTGGCCC
ss.DNA35680 1201 CATCCCACCCCATACCCAGGTACGGAACCAGGTGTACTCGTGGCTCCTGCGCCTACGGCC
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P_AAC58368 1201 CATCCCACCCCATACCCAGGTACGGAACCAGGTGTACTCGTGGCTCCTGCGCCTACGGCC
ss.DNA35680 1261 CCCCTCTCAAGGCTACCTAAGCAGCCGCTCCCCCAGGAGATGCTGCGTGCCTCAGGCCT
*****
P_AAC58368 1261 CCCCTCTCAAGGCTACCTAAGCAGCCGCTCCCCCAGGAGATGCTGCGTGCCTCAGGCCT
ss.DNA35680 1321 TACCCAGAAATGGGTACAGCGTGAGATATCCAACCTCGAGTACTTGATGCAACTCAACAC
*****
P_AAC58368 1321 TACCCAGAAATGGGTACAGCGTGAGATATCCAACCTCGAGTACTTGATGCAACTCAACAC
ss.DNA35680 1381 CATTGCGGGGCGGACCTACAATGACCTGTCTCAGTACCCTGTGTTCCCCTGGGTCTTGCA
*****
P_AAC58368 1381 CATTGCGGGGCGGACCTACAATGACCTGTCTCAGTACCCTGTGTTCCCCTGGGTCTTGCA
ss.DNA35680 1441 GGACTACGTGTCCCCAACCCTGGACCTCAGCAACCCAGCCGTCTTCCGGGACCTGTCTAA
*****
P_AAC58368 1441 GGACTACGTGTCCCCAACCCTGGACCTCAGCAACCCAGCCGTCTTCCGGGACCTGTCTAA
ss.DNA35680 1501 GCCCATCGGTGTGGTGAACCCCAAGCATGCCAGCTCGTGAGGGAGAAGTATGAAAGCTT
*****
P_AAC58368 1501 GCCCATCGGTGTGGTGAACCCCAAGCATGCCAGCTCGTGAGGGAGAAGTATGAAAGCTT
ss.DNA35680 1561 TGAGGACCCAGCAGGGACCATTGACAAGTTCCACTATGGCACCCACTACTCCAATGCAGC
*****
P_AAC58368 1561 TGAGGACCCAGCAGGGACCATTGACAAGTTCCACTATGGCACCCACTACTCCAATGCAGC
ss.DNA35680 1621 AGGCGTGATGCACCTACCTCATCCGCGTGGAGCCCTTCACCTCCCTGCACGTCCAGCTGCA
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P_AAC58368 1621 AGGCGTGATGCACCTACCTCATCCGCGTGGAGCCCTTCACCTCCCTGCACGTCCAGCTGCA
ss.DNA35680 1681 AAGTGGCCGCTTTGACTGCTCCGACCGGCAGTTCCACTCGGTGGCGGCAGCCTGGCAGGC
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P_AAC58368 1681 AAGTGGCCGCTTTGACTGCTCCGACCGGCAGTTCCACTCGGTGGCGGCAGCCTGGCAGGC
ss.DNA35680 1741 ACGCCTGGAGAGCCCTGCCGATGTGAAGGAGCTCATCCCGGAATTCTTCTACTTTCTGA
*****
P_AAC58368 1741 ACGCCTGGAGAGCCCTGCCGATGTGAAGGAGCTCATCCCGGAATTCTTCTACTTTCTGA
ss.DNA35680 1801 CTTCTGGAGAACCAGAACGGTTTTGACCTGGGCTGTCTCCAGCTGACCAACGAGAAGGT
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P_AAC58368 1801 CTTCTGGAGAACCAGAACGGTTTTGACCTGGGCTGTCTCCAGCTGACCAACGAGAAGGT
ss.DNA35680 1861 AGGCGATGTGGTGCTACCCCCGTGGGCCAGCTCTCCTGAGGACTTCATCCAGCAGCACCG
*****
P_AAC58368 1861 AGGCGATGTGGTGCTACCCCCGTGGGCCAGCTCTCCTGAGGACTTCATCCAGCAGCACCG
ss.DNA35680 1921 CCAGGCTCTGGAGTCGGAGTATGTGTCTGCACACCTACACGAGTGGATCGACCTCATCTT
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BLAST RESULTS A-11

P\_AAC58368 1921 CCAGGCTCTGGAGTCGGAGTATGTGTCTGCACACCTACACGAGTGGATCGACCTCATCTT

ss.DNA35680 1981 TGGCTACAAGCAGCGGGGGCCAGCCGCCGAGGAGGCCCTCAATGTCTTCTATTACTGCAC  
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P\_AAC58368 1981 TGGCTACAAGCAGCGGGGGCCAGCCGCCGAGGAGGCCCTCAATGTCTTCTATTACTGCAC

ss.DNA35680 2041 CTATGAGGGGGCTGTAGACCTGGACCATGTGACAGATGAGCGGGAACGGAAGGCTCTGGA  
\*\*\*\*\*

P\_AAC58368 2041 CTATGAGGGGGCTGTAGACCTGGACCATGTGACAGATGAGCGGGAACGGAAGGCTCTGGA

ss.DNA35680 2101 GGGCATTATCAGCAACTTTGGGCAGACTCCCTGTCAGCTGCTGAAGGAGCCACATCCAAC  
\*\*\*\*\*

P\_AAC58368 2101 GGGCATTATCAGCAACTTTGGGCAGACTCCCTGTCAGCTGCTGAAGGAGCCACATCCAAC

ss.DNA35680 2161 TCGGCTCTCAGCTGAGGAAGCAGCCCATCGCCTTGCACGCCTGGACACTAACTCACCTAG  
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P\_AAC58368 2161 TCGGCTCTCAGCTGAGGAAGCAGCCCATCGCCTTGCACGCCTGGACACTAACTCACCTAG

ss.DNA35680 2221 CATCTTCCAGCACCTGGACGAACTCAAGGCATTCTTCGCAGAGGTGACTGTGAGTGCCAG  
\*\*\*\*\*

P\_AAC58368 2221 CATCTTCCAGCACCTGGACGAACTCAAGGCATTCTTCGCAGAGGTGACTGTGAGTGCCAG

ss.DNA35680 2281 TGGGCTGCTGGGCACCCACAGCTGGTTGCCCTATGACCGCAACATAAGCAACTACTTCAG  
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P\_AAC58368 2281 TGGGCTGCTGGGCACCCACAGCTGGTTGCCCTATGACCGCAACATAAGCAACTACTTCAG

ss.DNA35680 2341 CTTAGCAAAGACCCCACCATGGGCAGCCACAAGACGCAGCGACTGCTGAGTGGCCCCGTG  
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P\_AAC58368 2341 CTTAGCAAAGACCCCACCATGGGCAGCCACAAGACGCAGCGACTGCTGAGTGGCCCCGTG

ss.DNA35680 2401 GGTGCCAGGCAGTGGTGTGAGTGGACAAGCACTGGCAGTGGCCCCGGATGGAAAGCTGCT  
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P\_AAC58368 2401 GGTGCCAGGCAGTGGTGTGAGTGGACAAGCACTGGCAGTGGCCCCGGATGGAAAGCTGCT

ss.DNA35680 2461 ATTCAGCGGTGGCCACTGGGATGGCAGCCTGCGGGTGACTGCACTACCCCGTGGCAAGCT  
\*\*\*\*\*

P\_AAC58368 2461 ATTCAGCGGTGGCCACTGGGATGGCAGCCTGCGGGTGACTGCACTACCCCGTGGCAAGCT

ss.DNA35680 2521 GTTGAGCCAGCTCAGCTGCCACCTTGATGTAGTAACCTGCCTTGCACTGGACACCTGTGG  
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P\_AAC58368 2521 GTTGAGCCAGCTCAGCTGCCACCTTGATGTAGTAACCTGCCTTGCACTGGACACCTGTGG

ss.DNA35680 2581 CATCTACCTCATCTCAGGCTCCCGGGACACCACGTGCATGGTGTGGCGGCTCCTGCATCA  
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P\_AAC58368 2581 CATCTACCTCATCTCAGGCTCCCGGGACACCACGTGCATGGTGTGGCGGCTCCTGCATCA

ss.DNA35680 2641 GGGTGGTCTGTCAGTAGGCCTGGCACCAAAGCCTGTGCAGGTCCTGTATGGGCATGGGGC  
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P\_AAC58368 2641 GGGTGGTCTGTCAGTAGGCCTGGCACCAAAGCCTGTGCAGGTCCTGTATGGGCATGGGGC

ss.DNA35680 2701 TGCAGTGAGCTGTGTGGCCATCAGCACTGAACTTGACATGGCTGTGTCTGGATCTGAGGA  
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P\_AAC58368 2701 TGCAGTGAGCTGTGTGGCCATCAGCACTGAACTTGACATGGCTGTGTCTGGATCTGAGGA

ss.DNA35680 2761 TGGAACTGTGATCATACACTGTACGCCGCGGACAGTTTGTAGCGGCACTACGGCCTCT  
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P\_AAC58368 2761 TGGAACTGTGATCATACACTGTACGCCGCGGACAGTTTGTAGCGGCACTACGGCCTCT

BLAST RESULTS A-12

ss.DNA35680 2821 GGGTGCCACATTCCCTGGACCTATTTTCCACCTGGCATTGGGGTCCGAAGGCCAGATTGT  
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 P\_AAC58368 2821 GGGTGCCACATTCCCTGGACCTATTTTCCACCTGGCATTGGGGTCCGAAGGCCAGATTGT  
 ss.DNA35680 2881 GGTACAGAGCTCAGCGTGGGAACGTCCTGGGGCCCAGGTCACCTACTCCTTGACCTGTA  
 \*\*\*\*\*  
 P\_AAC58368 2881 GGTACAGAGCTCAGCGTGGGAACGTCCTGGGGCCCAGGTCACCTACTCCTTGACCTGTA  
 ss.DNA35680 2941 TTCAGTCAATGGGAAGTTGCGGGCTTCACTGCCCCCTGGCAGAGCAGCCTACAGCCCTGAC  
 \*\*\*\*\*  
 P\_AAC58368 2941 TTCAGTCAATGGGAAGTTGCGGGCTTCACTGCCCCCTGGCAGAGCAGCCTACAGCCCTGAC  
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 P\_AAC58368 3001 GGTGACAGAGGACTTTGTGTTGCTGGGCACCGCCCAGTGCGCCCTGCACATCCTCCAAC  
 ss.DNA35680 3061 AAACACACTGCTCCCGGCCGCGCCTCCCTTGCCCATGAAGGTGGCCATCCGCAGCGTGGC  
 \*\*\*\*\*  
 P\_AAC58368 3061 AAACACACTGCTCCCGGCCGCGCCTCCCTTGCCCATGAAGGTGGCCATCCGCAGCGTGGC  
 ss.DNA35680 3121 CGTGACCAAGGAGCGCAGCCACGTGCTGGTGGGCCTGGAGGATGGCAAGCTCATCGTGGT  
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 P\_AAC58368 3121 CGTGACCAAGGAGCGCAGCCACGTGCTGGTGGGCCTGGAGGATGGCAAGCTCATCGTGGT  
 ss.DNA35680 3181 GGTGCGGGGCGAGCCCTCTGAGGTGCGCAGCAGCCAGTTCGCGCGGAAGCTGTGGCGGTC  
 \*\*\*\*\*  
 P\_AAC58368 3181 GGTGCGGGGCGAGCCCTCTGAGGTGCGCAGCAGCCAGTTCGCGCGGAAGCTGTGGCGGTC  
 ss.DNA35680 3241 CTCGCGGCGCATCTCCAGGTGTCCTCGGGAGAGACGGAATACAACCCTACTGAGGCGCG  
 \*\*\*\*\*  
 P\_AAC58368 3241 CTCGCGGCGCATCTCCAGGTGTCCTCGGGAGAGACGGAATACAACCCTACTGAGGCGCG  
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 P\_AAC58368 3301 CTGAACCTGGCCAGTCCGGCTGCTCGGGCCCCGCCCCCGGCAGGCCTGGCCCGGGAGGCC  
 ss.DNA35680 3361 CCGCCCAGAAGTCGGCGGGAACACCCCGGGGTGGGCAGCCCAGGGGGTGAGCGGGGCCCCA  
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 P\_AAC58368 3361 CCGCCCAGAAGTCGGCGGGAACACCCCGGGGTGGGCAGCCCAGGGGGTGAGCGGGGCCCCA  
 ss.DNA35680 3421 CCCTGCCCAGCTCAGGGATTGGCGGGCGATGTTACCCCTCAGGGATTGGCGGGCGGAAG  
 \*\*\*\*\*  
 P\_AAC58368 3421 CCCTGCCCAGCTCAGGGATTGGCGGGCGATGTTACCCCTCAGGGATTGGCGGGCGGAAG  
 ss.DNA35680 3481 TCCCGCCCCCTCGCCGGCTGAGGGGCCGCCCTGAGGGCCAGCACTGGCGTCT  
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 P\_AAC58368 3481 TCCCGCCCCCTCGCCGGCTGAGGGGCCGCCCTGAGGGCCAGCACTGGCGTCT

BLAST RESULTS A-13